DOCUMENT RESUME

ED 258 904 SO 016 657

AUTHOR Polyson, James; And Others
TITLE Psychologists and Nuclear War: A Survey.
PUB DATE Aug 84
NOTE 34p.; Paper presented at the Annual Meeting of the American Psychological Association (92nd, Toronto, Ontario, Canada, August 24-28, 1984).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Attitude Measures; *Disarmament; Females; Males; *Nuclear Warfare; Professional Associations; *Psychologists; Sex Differences; Social Science Research; Surveys
IDENTIFIERS American Psychological Association

ABSTRACT

A questionnaire was mailed to 530 randomly selected members of the American Psychological Association to determine their views on the nuclear war threat and on efforts by the American Psychological Association to reduce that threat. Completed questionnaires were received from 290 psychologists. The two-page questionnaire asked respondents whether they agreed or disagreed with the 1982 decision by the association's council of representatives to endorse a bilateral Soviet-American nuclear weapons freeze and whether the association should expand, decrease, or maintain its level of involvement on the issue of nuclear war and foreign policy. Also addressed were concerns about the probability and survivability of nuclear war and policy issues, such as the perceived importance of verifiability, the desirability of increasing or modernizing the United States' nuclear arsenal, and the possible effects of public involvement. Based on this study, psychologists are concerned about nuclear war and realistic about its consequences, but a majority are not pessimistic about the likelihood of nuclear holocaust in this century. Most respondents expressed support for the association's efforts to curb the arms race and a majority viewed public involvement as productive; an even greater majority agreed on the importance of verifiability. The results are discussed in relation to social psychological research on why people do or do not respond to potential threats against their safety and to recent empirical research on the question of why citizens take action against the threat of nuclear war. (Author/IS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
James A. Polyson
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED258904

BEST COPY AVAILABLE

Psychologists and Nuclear War: A Survey

James Polyson

University of Richmond

David Stein

Indiana State University

Barbara Sholley

University of Richmond

Paper presented at the meeting of the American Psychological Association, Toronto, Canada, August 1984

SP 016 657

Abstract

A questionnaire was mailed to members of the American Psychological Association to determine their views on the nuclear war threat and efforts by APA to reduce that threat. Based on this study, psychologists are concerned about nuclear war and realistic about the consequences of such a war, but a majority are not pessimistic about the likelihood of nuclear holocaust in this century. Most respondents expressed support for APA efforts to curb the arms race and a majority viewed public involvement in the nuclear war issue as productive; however, a vast majority said that verification of arms control agreements is either important or essential. The results are discussed in relation to social psychological research on why people do or do not respond to potential threats against their safety and to recent empirical research on the question of why citizens take action against the threat of nuclear war. Gender differences are discussed in relation to recent theories on the moral development of women.

Psychologists and Nuclear War: A Survey

In 1982, the Council of Representatives of the American Psychological Association passed a resolution calling for a bilateral freeze on the testing, production, and deployment of nuclear weapons (Abeles, 1983, p. 677; Mervis, 1982; "Nuclear Disarmament Resolution," 1982). That decision has been the subject of much controversy as evidenced by numerous letters to the APA Monitor speaking for and against the Council's nuclear freeze resolution and APA political involvement in general. Because of the importance of this issue to psychologists and indeed, to all of humanity, we decided to survey a random sample of the APA members about their own nuclear war attitudes.

A number of recent authors have discussed the valuable contributions which psychologists can make and are making in the struggle for peace and human survival (Fischhoff, Pidgeon, & Fiske, 1983; Kimmel, 1985; Klineberg, 1984; Markey, 1985; Morawski & Goldstein, 1985; Nelson, 1985; Schofield & Pavelchak, 1985; Smurthwaite, 1985; Wagner, 1985). It has also been said, however, that psychologists' contributions to nuclear war prevention efforts over he past four decades have been "sporadic" and "inadequate" (Morawski

& Goldstein, 1985, p. 282; Wagner, 1985, p. 531). On an individual basis, most psychologists have done little more than discuss and read about the nuclear war threat (McConnell, Brown, Ruffing, Strupp, Duncan, & Kurdek, 1984). The present survey was conducted in the hope that these preliminary data on psychologists' nuclear war attitudes will increase our understanding of their level of concern, their sense of optimism or pessimism, and their views on APA and public activism.

Method

In April of 1983, 530 nuclear war attitude questionnaires were mailed to American Psychological Association members whose names and addresses were selected randomly from the 1983 APA Membership Register. Completed questionnaires were received from 290 psychologists (187 males and 103 females) for a return rate of 54.7%. The return rate was slightly higher for females (60%) than males (52%). The mean age of respondents was 44.2 years with a range of 26 to 80. Seventy-six per cent of respondents reported being married and 24% reported being single. The average length of APA membership was 12.9 years with a range from 1 to 44.

The two-page questionnaire asked respondents whether they agreed or disagreed with the 1982 decision

by the APA Council of Representatives to endorse a bilateral Soviet-American nuclear weapons freeze and whether APA should expand, decrease, or maintain its level of involvement on the issue of nuclear war and foreign policy. The questionnaire also addressed the respondents' level of concern about nuclear war and their predictions about its likelihood and survivability. Other questions focused on policy issues such as the perceived importance of verifiability, the desirability of increasing or modernizing the United States' nuclear arsenal, and the possible effects of public involvement. A final question asked respondents to write comments on these or other issues related to nuclear weapons and nuclear war.

Results

For each questionnaire item, three sets of results are reported: the percentage of respondents who marked each response option, the nonparametric test for sex differences, and the interitem relationships between that question and each of the two questions addressing APA's role in the prevention of nuclear war.

1. How concerned are you about the possibility of nuclear war?

The findings for the percentage of the total sample are: extremely concerned = 48%; somewhat concerned =

43%; not very concerned = 8%; not at all concerned = 1%. There is no significant difference between the sexes, $\underline{X}^2(3) = 5.46$, $\underline{p} = .14$.

Concern about the possibility of nuclear is significantly related to opinions about the Council of Representative's nuclear freeze resolution, $\underline{X}^2(6) = 45.63$, $\underline{p} < .0001$, and opinions about whether APA should expand or decrease its future involvement, $\underline{X}^2(6) = 60.37$, $\underline{p} < .0001$. Fifty-six percent of those who agreed with the Council's endorsement reported that they were extremely concerned about nuclear war; that level of concern was expressed by 19% of those who disagreed. "Not very" and "not at all" concerned were marked by only 5% of those respondents who agreed with the endorsement compared to 26% of those who disagreed. These findings were replicated on question 15, suggesting that psychologists who are more concerned about the threat of nuclear war are more likely to advocate APA future involvement, and those who are not concerned are more likely to advocate decreased APA involvement.

2. Have you ever considered the possibility of nuclear war when making decisions concerning your future, such as where to live?

Twenty-five per cent of these psychologists could

recall at least one instance in which nuclear war entered his or her decision making; 75% responded "no." The relative percentages for men and women are not significantly different, $\underline{X}^2(1) = .05$, $\underline{p} = .82$.

3. Have you made any preparations for your personal safety in the event of nuclear attack?

Only 3% of psychologists surveyed responded "yes" while 96% answered "no." No gender differences are evidenced, $\underline{X}^2(1) = .89$, $\underline{p} = .34$.

4. Do you know the location of a fallout shelter in your city?

The percentages marking "yes" or "no" were 21% and 78% respectively. The nonparametric comparison between male and female psychologists is not statistically significant, $\underline{X}^2(1) = 3.15$, $\underline{p} = .08$.

5. If there were a nuclear war, what are the chances that you as an individual would survive?

The results are: excellent = 2%; fair = 8%; neutral (can't say) = 20%; poor = 29%; extremely poor = 39%. With overall $\underline{X}^2(4) = 9.43$, $\underline{p} = .05$, it appears that women were somewhat more likely than men to respond "extremely poor" (48% of women versus 35% of men) and less likely to respond "excellent" or "fair" (4% of women versus 14% of men).

Perceived likelihood of personal survival is

significantly related to opinions about the Council of Representative's nuclear freeze resolution, $\underline{X}^2(8) = 25.29$, $\underline{p} = .001$, as well as opinions about whether APA should expand or decrease its future involvement, $\underline{X}^2(8) = 20.55$, $\underline{p} = .008$. "Poor" or "extremely poor" chances of personal survival were reported by 77% of those who agreed with the nuclear freeze resolution versus 57% of those who disagreed. "Excellent" or "fair" chances of survival, on the other hand, were expressed by a greater percentage of the group who disagreed with the endorsement (17% compared to 9% of those in agreement). Perceived likelihood of survival was similarly related to opinions about future APA involvement. These results are consistent with a previous study by Tyler & McGraw (1983) in which people who believed that nuclear war is not survivable were more supportive of peace activism. Interestingly, the psychologists in the present study who were undecided about the freeze endorsement were more likely to mark "neutral" on chances of survival compared to those who agreed or disagreed (48%, compared to 17% and 26% respectively). Likewise, the respondents who advocated the "same level of future APA involvement" were more likely to express neutrality on their chances of survival.

6. If there were an all-out nuclear war, would you want

to survive it?

When this question was asked in a public opinion survey, 58% said they would not want to survive ("Most Iowans Prefer Death," 1982). In the present survey, the percentages were evenly distributed across the three response categories of "yes" (35%), "no" (34%), and "don't know" (31%). There is a clear sex difference, $\underline{X}^2(2) = 12.73$, $\underline{p} = .001$, with a greater percentage of men than women marking "yes" (40% to 24%) and a greater percentage of women than men marking "no" (45% to 25%). This sex difference had also been found in the forementioned Iowa survey.

The perceived wish to be or not to be among the survivors of an all-out nuclear war is significantly associated with opinions about APA's future involvement, $\underline{X}^2(4) = 12.88$, $\underline{p} = .01$. Fifty-six percent of the APA members who advocated a decreased role said that "yes," they would want to survive, while the percentages for those who wanted APA to expand or maintain the same level of involvement were 30% and 29% respectively. Similarly, only 18% of those who favored a decrease in APA involvement felt that they would not want to survive, compared to 36% for each of the other two groups.

7. In your opinion, will there be a nuclear war before

the year 2000?

Ten per cent of all respondents marked "probably," 53% marked "probably not," and 35% marked "decline to predict." More men than women responded "probably not" (59% to 45%) while more women marked "decline to predict" (46% to 30%), $\underline{X}^2(2) = 7.08$, $\underline{p} = .03$.

The belief that nuclear war probably will or will not occur prior to the year 2000 also relates to opinions about whether APA should expand or decrease its future involvement in this issue, $\underline{X}^2(4) = 24.19$, $\underline{p} < .0001$. Among the respondents who optimistically predicted "probably not," 31% advocated an expanded role compared to 59% of those who said "probably" and 60% of those who declined to predict. The latter result suggests that approval of APA-sponsored peace activism is more likely among psychologists who are pessimistic or uncertain about the likelihood of holocaust, consistent with the finding in another survey that anti-nuclear war activists were more pessimistic about the likelihood of war than was the general population (Tyler & McGraw, 1983). It should be noted that even among those respondents who expressed optimism about the risk of nuclear war in this century, only 22% felt that APA should reduce its level of involvement while 48% preferred "about the same level of involvement."

8. In your opinion, will there ever be a nuclear war?

The percentages marking "yes," "no," and "don't know," were 35%, 10%, and 52% respectively. There is no significant difference between male and female respondents, $\underline{x}^2(2) = 3.76$, $\underline{p} = .15$.

It is interesting that while predictions about the likelihood of nuclear war before the year 2000 (question 7) are significantly associated with opinions about APA's future role in preventing nuclear war, predictions as to whether there will "ever" be a nuclear war are not, $\underline{x}^2(4) = 8.71$, $\underline{p} = .07$. While there are certainly many psychologists who care about future generations and the long term "fate of the earth," the perceived immediacy of the nuclear war threat may be a more relevant factor in advocating APA involvement.

9. In your opinion, what percentage of the U.S. population would survive an all-out nuclear war?

Only 8% of the respondents expressed the opinion that no one (0%) would survive an all-out nuclear war. The most frequently marked answer was "1-25%" of the population which was marked by 49% of the respondents. Thirty-three per cent marked either "25-50%" or "50-75%" and only 2% were optimistic that 75-100% of the U.S. would survive an all-out exchange. More men than women responded in the two latter categories (20% to 4%)

while more women than men (14% to 5%) predicted that there would be no survivors, with overall $\underline{X}^2(4) = 15.58$, $\underline{p} = .003$.

The perceived destructiveness of all-out nuclear war is significantly related to opinions about the Council of Representative's nuclear freeze resolution, $\underline{X}^2(8) = 22.08$, $\underline{P} = .005$, and opinions about whether APA should expand or decrease its future involvement, $\underline{X}^2(8) = 49.61$, $\underline{p} < .0001$. On each of the five response options, APA members who agreed with the Council were more pessimistic and less optimistic concerning the devastation of nuclear war compared to those in disagreement; that same finding held true for the question on APA's future involvement.

10. Does the American public's direct involvement in the nuclear war issue decrease/increase/or have no effect on the likelihood of nuclear war?

On this question, the majority (69%) marked "decrease," 8% marked "increase," and 20% marked "no effect." Male and female psychologists did not differ in their responses, $\underline{X}^2(2) = .08$, $\underline{p} = .96$.

As one might expect, beliefs about the effects of public involvement in the nuclear war issue are significantly associated with opinions about the Council's nuclear freeze endorsement, $\underline{x}^2(4) = 24.53$, $\underline{p} =$

.0001, and opinions about future APA involvement, $\underline{X}^2(4) = 36.44$, $\underline{p} < .0001$. For example, 76% of the psychologists who agreed with the freeze endorsement and 65% of those who were undecided expressed the belief that public involvement lowers the risk of nuclear holocaust; only 41% of those who disagreed with the Council expressed that belief. Twenty-four percent of the respondents who disagreed with the Council's statement responded that public involvement increases the risk of nuclear war; the percentages for those who agreed or were undecided is 6% and 5% respectively. The opinion that public involvement has no effect was offered by 18% of the group which agreed with the endorsement compared to 35% and 32% of the "disagree" and "undecided" groups. Findings on the relationship between beliefs about public involvement and future APA involvement are uniformly consistent with the above findings. It is interesting to note that 41% of those who disagreed with the decision by the Council of Representatives expressed the opinion that activities by citizens can lower the risk of nuclear war. This is consistent with a number of written comments from this group voicing sympathies for the nuclear freeze movement but opposing the use of their professional organization to further that goal.

11. Do you agree or disagree with the decision by the APA Council of Representatives to endorse a bilateral Soviet-American nuclear weapons freeze?

By more than a 3 to 1 ratio, the psychologists surveyed were in agreement with that endorsement: 76% agreed; 15% disagreed; and 8% were undecided. At the $p = .02$ level, $\chi^2(2) = 7.70$, more women than men were supportive of the endorsement (82% versus 73% of men) and more men than women were opposed (20% compared to 7% of women).

Reactions to the APA Council's call for a nuclear arms freeze are associated with views on the appropriate level of future APA involvement, $\chi^2(4) = 173.06$, $p < .0001$. A majority (54%) of those who agreed with the specific action of the Council also advocated further expansion of APA involvement, and only 3% of the psychologists who supported the Council's freeze resolution advocated a decrease in future APA involvement. However, 43% of those who were in agreement with the Council recommended that APA maintain about the same level of involvement, suggesting that many APA members were comfortable with a statement of endorsement but did not favor additional activism. As one would expect, a vast majority (86%) of the smaller group of respondents who disagreed with the Council's

freeze endorsement also favored a decrease in APA involvement.

12. In your opinion, how important is the issue of verifiability in the negotiation of nuclear arms control?

Sixty-five per cent of all respondents viewed verifiability as "essential," 28% marked "important but not essential," and only 5% viewed verifiability as "relatively unimportant." Males and females were equally concerned about verification of arms control treaties, $\underline{X}^2(2) = 1.96$, $\underline{p} = .37$.

Research has found that verification is a key issue influencing public acceptance or rejection of arms control proposals (Fischhoff, Pidgeon, & Fiske, 1983; Milburn, Watanabe, & Kramer, 1984). That is consistent with the present results which show that the perceived importance of verifiability is significantly associated with opinions about the Council's endorsement of a bilateral nuclear weapon freeze, $\underline{X}^2(4) = 13.50$, $\underline{p} = .009$. Regardless of their opinions about the Council's call for a nuclear freeze, very few psychologists viewed verifiability as unimportant. However, 61% of those who agreed with the Council viewed verification as essential, while the percentages for those who disagreed or were undecided were 83% and 87% respectively. The

view that verification is important rather than essential was reported by 34% of those who agreed with the freeze endorsement, compared to 12% and 9% of the other two groups. These differences are consistent but slightly larger with respect to future APA involvement, $\underline{X}^2(4) = 21.33$, $\underline{p} = .0003$. For example, 85% of the APA members who advocated a decrease in involvement viewed verification as essential, compared to 55% of those who wanted an increase in APA involvement.

13. Do you believe that meaningful arms control will first require a build-up or modernization of American nuclear forces?

The relative percentages for "yes," "no," and "undecided," were 16%, 64%, and 18% respectively, with no gender differences, $\underline{X}^2(2) = 2.40$, $\underline{p} = .30$.

Not surprisingly, there is a significant relationship between the respondents' views on the need for a nuclear arms build-up and their opinions regarding the Council's nuclear freeze endorsement, $\underline{X}^2(4) = 52.98$, $\underline{p} < .0001$, as well as future APA involvement, $\underline{X}^2(4) = 54.44$, $\underline{p} < .0001$. For example, 48% of those who disagreed with the Council believed that a nuclear arms build-up or modernization is necessary, only 10% of the group who agreed with the Council expressed that view. Likewise, a substantial majority (74%) of the

respondents who agreed with the Council indicated that a build-up is not needed; for the groups who were in disagreement or were undecided, the percentages were 32% in each case. Again, the results are consistent for both APA-related questionnaire items.

14. Do you believe that a Soviet-American nuclear weapons freeze would be verifiable?

Forty per cent responded that "yes," a freeze would be verifiable. Twenty-two per cent marked "no," and 34% "don't know." Sex differences indicate that women were less likely to respond "yes" (31% compared to 47% of men) and more likely to respond "don't know" (41% of women compared to 32% of men), with $\underline{X}^2(2) = 6.49$, $\underline{p} = .04$.

The perceived feasibility of verification, like the perceived importance of verification (question 12), is related to views on the Council's endorsement of a nuclear weapons freeze, $\underline{X}^2(4) = 25.99$, $\underline{p} < .0001$ as well as future APA involvement, $\underline{X}^2(4) = 17.15$, $\underline{p} = .002$. Basically, this reiterates the findings for question 12 as psychologists who agreed with or were undecided about the Council's resolution and psychologists who favored an equal or greater level of future involvement were more likely to hold the opinion that a bilateral freeze would be verifiable.

15. Do you feel that APA should expand/decrease/or maintain its current level of involvement on the issue of nuclear war and foreign policy?

"Expand involvement" was the response chosen by 45% of these APA members; "decrease" was marked by 18%, and 37% indicated that APA should maintain about the same level of involvement. A sex difference, $\chi^2(2) = 11.64$, $p = .003$, shows that a greater percentage of women than men felt that APA should either expand involvement (51% compared to 42%) or maintain the same level (43% compared to 34% for males). A greater percentage of men than women (24% to 7%) gave the opinion that APA involvement in these issues should decrease.

Discussion

APA Involvement

This survey supports Klineberg's assertion in his November 1984 American Psychologist article that the APA Council of Representatives' endorsement of a bilateral freeze on the testing, production, and deployment of nuclear weapons did reflect the views of the vast majority of APA members (p. 1247). In the year following the Council's resolution, three fourths of the psychologists surveyed expressed agreement with that position, and 82% felt that APA should maintain or

expand its involvement in the future. We should mention that these statistics may not reflect the intensity of opposition by the smaller group of psychologists who disagree with APA efforts to prevent nuclear war; in fact, many of their written comments in this survey were particularly long and emphatic.

In summary, psychologists who agreed with the nuclear freeze endorsement and those who advocated expanded APA involvement were more likely to express pessimism about the level of devastation and their chances of survival should a nuclear war occur. Those psychologists were also more likely to believe that public involvement lowers the risk of nuclear holocaust and more likely to view verification as important rather than essential. The question of Future APA involvement is also significantly related to the desire to survive or not survive a nuclear war and the perceived likelihood of nuclear war before the year 2000. Respondents who advocated that APA expand its involvement in the prevention of nuclear war were less likely to express a desire to survive should such a war occur and more likely to express pessimism about the probability of holocaust before the year 2000.

Gender Differences

It appears that woman psychologists were more

supportive of the nuclear freeze resolution than were men. In addition, women were more likely to advocate an expansion of APA involvement in the nuclear war issue while men were more likely to advocate a decreased role. In contrast to these findings, no sex differences were found in another survey of psychologists' nuclear war related attitudes and behavior (McConnell, Brown, Ruffing, Strupp, Duncan, & Kurdek, 1984). It is possible, since the McConnell et al. study focused on peace related behavior whereas the present survey focuses more on attitudes, that attitudinal sex differences are not necessarily translated into behavioral differences. It is also possible that the present study is a more representative sample of women psychologists, as the percentage of respondents who are women (36%) is closer to the percentage for the APA membership as a whole, compared to the McConnell et al. study in which 23% of the sample were women. In addition, the overall return rate is somewhat higher in the present survey (54.7% compared to 31.5%), perhaps because the McConnell et al. questionnaire involves a disclosure of personal political behavior as well as attitudes. Despite the fact that these sex differences were not replicated in the McConnell et al. study, the reliability of gender differences is supported by the

consistency among the seven questionnaire items on which significant differences were obtained, plus the consistency with public opinion polls taken about the same time which showed that women in general were more opposed to nuclear weapons escalation ("Newsweek Poll on the Gender Gap," 1983; White & Feshbach, 1984). Furthermore, in view of the previous finding by Tyler & McGraw (1983) that anti-nuclear activists were more pessimistic about nuclear war than was the general population (p. 36), the stronger support for the nuclear freeze resolution among women psychologists is consistent with their greater pessimism concerning the likelihood and destructiveness of nuclear war (items 5,6,7, and 9). Their support for the Council's resolution may also reflect the past experiences and successes women psychologists have had in pursuing through the mechanisms of APA another important concern, the elimination of sexism, although that explanation is not supported by Tyler & McGraw (1983) who found peace activism to be unrelated to judgments about whether past political behavior has been effective (p. 37).

Tyler & McGraw (1983) did find that anti-nuclear war behavior is strongly related to feelings of ethical responsibility (p. 37). Although a vast majority of

male and female respondents reported being concerned about the threat of nuclear war, future research could address the possibility that men and women in general have some different ethical concerns about this issue which are expressed in different ways. A theoretical perspective which seems consistent with the sex differences found here can be found in the recent book, In a Different Voice (Gilligan, 1982). Gilligan argues that the primary moral imperative for women is an "ethic of caring which rests on the premise of nonviolence -- that no one should be hurt." (p. 174), while men, according to Gilligan, have a greater concern for the protection of abstract principles such as justice and human rights. This explanation of the sex differences among psychologists is particularly interesting in view of the social psychological research finding by Shelton and Roger (1981) that people are more likely to respond to a potential threat when they empathize with the potential victims of that threat. Shelton and Rogers did not find sex differences in their college student sample; however, these theories could be tested more directly in future research on nuclear war related attitudes and behavior.

Individual Involvement

The results of this survey show that the threat of

nuclear war is an issue of concern for a vast majority of psychologists, male and female. However, less than one fourth of the respondents in this survey reported that the nuclear war threat entered into their personal decision-making. This is consistent with the absence of personal survival plans (only 3% of this sample reported having such plans). It is also consistent with the finding in the McConnell et al. survey that while most psychologists have read about and discussed the nuclear war threat, only a small minority have engaged in more active efforts to promote awareness and reduce the chances of war. It appears that while most psychologists are concerned about nuclear war and seem to disagree with the ongoing nuclear weapons escalation (item 13), many have not responded to the Council's call for individual peace initiatives by APA members, a challenge issued along with the freeze resolution ("Nuclear Disarmament Resolution," 1982).

Two areas of research which may help to clarify this apparent discrepancy between concern and involvement are the research in social psychology on the factors which influence an individual's response to communications about a potential threat (e.g., Mewborn & Rogers, 1979; Rogers & Mewborn, 1976; Shelton & Rogers,

1981) and the research on cognitive risk interpretation (e. g., Tyler & McGraw, 1983). For instance, coping responses to threat are more likely when the consequences of the threatening event are perceived as highly noxious (Rogers and Mewborn, 1976). Similarly, McConnell et al. found that psychologists who did not wish to survive a nuclear war were more likely to support peace-related activities, and Tyler & McGraw (1983) found that citizens who believe that nuclear war is not survivable are more likely to engage in peace activities. Based on the present data, there appears to be very little naivete among psychologists as to the horrid consequences of nuclear war. Ninety-eight percent of this sample responded that at least a fourth of the U.S. population would die in a nuclear exchange, only 10% offered the opinion that their personal chances of survival would be "excellent" or "fair," and less than a third expressed a desire to survive a nuclear war should one occur. One should keep in mind, however, that intellectual knowledge about nuclear weapons does not necessarily represent a full psychological awareness of the suffering or damage a nuclear war would entail (Lifton, 1982a). An interesting study by Fiske, Pratto, & Pratto (1983) suggests that the vividness of cognitive images about nuclear holocaust may be a significant

predictor of political activity on this issue. Future research might test the hypothesis that some psychologists do not experience the vivid images of nuclear war which might stimulate direct personal involvement.

Research also suggests that responses to threat are more likely when the noxious event is seen as likely to occur in the absence of preventive actions (Mewborn & Rogers, 1979; Rogers & Mewborn, 1976; Shelton & Rogers, 1981; Tyler & McGraw, 1983). A relevant finding in the present study is that a slight majority of the psychologists surveyed (53%) optimistically predicted that there will probably not be a nuclear before the year 2000, although only 10% responded optimistically to the same question posed without a time frame. It is possible that for some psychologists, a lack of involvement in the nuclear war issue may relate to the optimistic belief that nuclear war will not occur in the foreseeable future.

Studies have also shown that a person is more likely to respond to threat when potential coping responses are viewed as effective (Rogers & Mewborn, 1976; Shelton & Rogers, 1981; Tyler & McGraw, 1983). Based on the present survey, most psychologists believe that nuclear war prevention efforts can be effective.

More than two-thirds of the respondents said that direct citizen involvement lowers the risk of nuclear war, while only 8% expressed the belief that such involvement increases the risk. It is important to note however, that neither the McConnell et al. survey nor the present one directly addresses the issue of how psychologists view the potential efficacy of individual efforts to lower the risk of nuclear war. A study focusing on that issue would be especially interesting due to the number of recent articles in psychology periodicals which recommend specific actions psychologists can take to promote peace.

Possibilities for Future Research

The attitude survey offers some clues, but not a sufficient explanation of the factors which may influence psychologists in their decisions of whether or not to invest personal resources in the prevention of nuclear war. While attitudes are important, future research might focus on the behavioral contingencies which influence how psychologists invest their time and energy. It would be interesting, for example, to determine the factors which motivate and reinforce those psychologists who have already made substantial contributions. Also, how have psychologists resolved the potential role conflicts between political,

scientific, and clinical activities? What types of contributions by APA members will best facilitate our chances for peace?

These questions have been discussed by a number of authors; however, there is a need for more empirical research just as there is a need for replication, extension, and refinement of the present survey. Several reviews of public opinion surveys show that some nuclear war attitudes and opinions are quite resistant to change while others, such as perceptions of relative nuclear strength levels between the United States and Soviet Union, are not (Klineberg, 1984; Kramer, Kalick, & Milburn, 1983; Milburn, Watenabe, & Kramer, 1984; Schofield & Pavelchak, 1985). It will therefore be important to assess future changes in psychologists' nuclear war related attitudes and behavior. The need for replication is also demonstrated by the fact that the present survey and the McConnell et al. survey together provide a better understanding of psychologists and nuclear war than would either study alone. Consistencies and discrepancies, such as the gender differences found in this survey, suggest numerous research possibilities.

Another finding which suggests a need for research is the 10% of respondents who expressed pessimism about

the likelihood of nuclear war before the year 2000 and the 35% who were pessimistic about its long term eventuality. There has been a great deal of discussion and some research on the possible psychological consequences of confronting the risk of nuclear annihilation, and some of the written comments by respondents in this survey were direct expressions of emotional distress. Although the percentage of pessimistic responses appears to be lower than those found in surveys of the general population, there is a need for research on the emotional and interpersonal experiences of APA members who are pessimistic about nuclear holocaust, especially in view of initial evidence that feelings of pessimism and helplessness may be associated with professional burnout among psychologists (Nathan, Thoreson, & Kilburg, 1983, p. 23).

References

Abeles, N. (1983). Proceedings of the American Psychological Association, Incorporated, for the year 1982. American Psychologist, 38, 649-682.

Fishhoff, B., Pidgeon, N., & Fiske, S.T. (1983). Social science and the politics of the arms race. Journal of Social Issues, 39(1), 161-180.

Fiske, S.T., Pratto, F., & Pavelchak, M.A. (1983). Citizens' images of nuclear war: Contents and consequences. Journal of Social Issues, 39(1), 41-65.

Gilligan, C. (1982). In a different voice: Psychological theory and women's development. Cambridge: Harvard University Press.

Kimmel, P.R. (1985). Learning about peace: Choices and the U.S. Academy of Peace as seen from two different perspectives. American Psychologist, 40, 536-541.

Klineberg, O. (1984). Public opinion and nuclear war. American Psychologist, 39(11), 1245-1253.

Kramer, B.M., Kalick, S.M., & Milburn, M.A. (1983). Attitudes toward nuclear weapons and nuclear war: 1945-1982. Journal of Social Issues, 39(1), 7-24.

Leydet, F.G. (1983, September-October). Planning for peace. Harvard Magazine, pp. 29-31.

Lifton, R.G. (1982a). Beyond psychic numbing: A call to awareness. American Journal of Orthopsychiatry, 52, 619-629.

Markey, E.J. (1985). The politics of arms control: A matter of perception. American Psychologist, 40, 557-560.

McConnell, S.C., Brown, S.D., Ruffing, J.N., & Strupp, J.K., Duncan, B.L., & Kurdek, L.A., (1984, August). Psychologists' attitudes and activities regarding nuclear arms. Paper presented at the meeting of the American Psychological Association, Toronto.

Mervis, J. (1982). Council calls for nuclear freeze. APA Monitor, 13, 1.

Milburn, M.A., Watanabe, P.Y., Kramer, B.M. (1984, August). Nuclear related attitudes and support for a nuclear freeze. Paper presented at the meeting of the American Psychological Association, Toronto.

Morawski, J.G., & Goldstein, S.E. (1985). Psychology and nuclear war: A chapter in our legacy of social responsibility. American Psychologist, 40(3), 276-284.

Most Iowans prefer death over living after nuclear holocaust. (1982, June 21). Behavior Today, pp. 3-4.

Nathan, P., Thoreson, R., & Kilburg, R. (1983). Board of professional affairs steering committee on distressed psychologists. Unpublished report.

Nelson, A. (1985). Psychological equivalence: Awareness and response-ability in our nuclear age. American Psychologist, 40, 549-556.

Newsweek poll on the gender gap: Sharp differences. (1983, September 19). Newsweek, p. 40.

Nuclear disarmament resolution approved by APA Council of Representatives. (1982, September 27). Behavior Today, p. 8.

Polyson, J., Teackenbrock, D., Minor, K., Gronet, S., Maddux, J., & Rahaim, G. (in press). College students' nuclear war predictions: Iran Crisis and three years later. Contemporary Social Psychology.

Rogers, R.W., & Mewborn, C.R. (1976). Fear appeals and attitude change: Effects of a threat's noxiousness, probability of occurence, and the efficacy of coping responses. Journal of Personality and Social Psychology, 34, 54-61.

Schmidt, W.E. (1983 February 6). Poll shows lessening of fear that U.S. military is lagging. New York Times, pp. 1, 12.

Schofield, J., & Pavelchak, M. (1985). The day after:

The impact of a media event. American Psychologist, 40, 542-548.

Shelton, M.L., & Rogers, R.W. (1981). Fear-arousing and empathy-arousing appeals to help: The pathos of persuasion. Journal of applied Social Psychology, 11, 366-378.

Siegel, S. (1956). Nonparametric statistics for the behavioral sciences. New York: McGraw-Hill.

Smurthwaite, T.J. (1985). Nuclear arms escalation and the role of psychologists. American Psychologist, 40, 575-577.

Tyler, T.R., & McGraw, K.M. (1983). The threat of nuclear war: Risk interpretation and behavioral response. Journal of Social Issues, 39(1), 25-40.

Wagner, R.V. (1985). Psychology and the threat of nuclear war. American Psychologist, 40, 531-535.

White, M.J., & Feshbach, S. (1984, August). Nuclear disarmament in Middletown: Attitudinal, demographic, and psychological variables. Paper presented at the meeting of the American Psychological Association, Toronto.

Author Notes

This study was begun while the first author was a faculty member at Indiana State University. The Psychology Department of Indiana State University and the Psychology Department of the University of Richmond have been supportive of this research and are gratefully acknowledged.

An earlier draft of this paper was presented at the 1984 meeting of the American Psychology Association, Toronto, in a Symposium, Before and after "The Day After" (S. Oskamp, chair).

The questionnaire used in this study contains several items which were adapted from a survey of college students (Polyson, Teckenbrock, Minor, Gronet, Maddux, & Rahaim, in press). The coauthors of that study are acknowledged for their help in writing those items.

Please address reprint requests to James Polyson, Department of Psychology, University of Richmond, Richmond, VA 23173.